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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,566	04/07/2004	Louis Don Astorino	03-200-US	8553

7590 04/19/2005

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EXAMINER	
SHAAWAT, MUSSA	

ART UNIT	PAPER NUMBER
2128	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/820,566	ASTORINO, LOUIS DON	
	Examiner	Art Unit	
	Mussa A Shaawat	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/7/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to Application # 10/820,566, filed on April 7, 2004. Claims 1-22 are presented for examination.

Specification

2. The Abstract is objected to because it contains more than 150 words. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is drawn to non-statutory subject matter.

Specifically, claim 1, 15, and 20 are not technologically embodied and merely recite, "analyzing a set of results of a metaphor elicitation technique" that could be carried out by a combination of paper and pencil calculations.

The Examiner further submits that Applicant's have not recited any limitations that provide a tangible result and have merely claimed a manipulation of abstract ideas realized as mathematical constructs. Section 2106 [R-2] (Patentable Subject Matter - Computer-Related Inventions) of the MPEP recites the following:

"In practical terms, claims define nonstatutory processes if they:
- Consist solely of mathematical operations without some claimed practical application (i.e., executing a "mathematical algorithm"); or

- **Simply manipulate abstract ideas**, e.g., a bid (Schrader, 22 F.3d at 293-94, 30 **USPQ2d at 1458-59) or a bubble hierarchy (Warmerdam, 33 F.3d at 1360, 31**

- **USPQ2d at 1759),** without some claimed practical application."

Claims 2-3, and 5-14 depend from claim 1; therefore they inherit the same deficiencies.

Claims 16-19 depend from claim 15; therefore they inherit the same deficiencies.

Claims 21-22 depend from claim 20; therefore they inherit the same deficiencies.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1-4, 14-17, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Gerald Zaltman US Patent No. (6,315,569) referred to hereinafter as Zaltman.

As per claim 1, Zaltman teaches a method of developing design objectives comprising the steps of: analyzing a set of results of a metaphor elicitation technique (see col.2 lines 59-63, ""further construct elicitation ... augment those elicited in steps");

Extracting relevant dimensions (see col.5 lines 56-61images are being extracted such as shapes i.e. dimensions) and activating cues from the set of results (see col.3 lines 62-64);

Prioritizing the relevant dimensions and the activating cues (see col.7 lines 23-40, the user sorts pictures into categories and is asked to describe which are good and which are not good i.e. prioritizing relevant dimensions); and

Developing the design objectives through use of the relevant dimensions and the activating cues (see col.9. lines 23-36, the information extracted from the user is then used to guide the development of the user's design objectives).

As per claim 2, Zaltman teaches a method of claim 1, further comprising the step of transforming the design objectives into a design (see col.9 lines 31-35).

As per claim 3, Zaltman teaches a method of claim 1 further comprising the step of performing the metaphor elicitation technique before the analyzing step (see col.2 line 47-col.3 line 50, see the steps of the metaphor elicitation technique).

As per claim 4, Zaltman teaches a method of claim 1 further comprising the step of prioritizing the relevant dimensions and the activating cues using an automated computer program (see col.10 lines 51-54, a graphical model of the information extracted is constructed through the use of a computer program.).

As per claim 14, Zaltman teaches a method of claim 1, wherein the developing of design objectives represents a portion of a project, further wherein a cost of the developing of design objectives are at least 5% of an overall cost of the project (see ol.3 lines 35-40, "the diagrammatic metaphor ... users participating in a project").

As per claim 15, Zaltman teaches a method of developing architectural design objectives for use in design of a building comprising the steps of: applying a metaphor elicitation technique, wherein the metaphor elicitation technique includes conducting an interview with at least one future occupant of the building, wherein the applying step provides a set of metaphors (see col.2 lines 59-63, ""further construct elicitation ... augment those elicited in steps");

Analyzing a set of results of the metaphor elicitation technique, wherein the set of results includes a transcript of the interview and the set of metaphors (see col.2 lines 59-63, ""further construct elicitation ... augment those elicited in steps");

Extracting relevant dimensions (see col.5 lines 56-61images are being extracted such as shapes i.e. dimensions) and activating cues from the set of results, wherein the extracting includes evaluating transcripts of the interview (see col.3 lines 62-64);

Determining how the relevant dimensions and activating cues are related to the set of metaphors (see col.3 lines 62-64);

Prioritizing the relevant dimensions and the activating cues, wherein the prioritizing comprises: determining a number of times that each of the relevant dimensions and activating cues are mentioned by the at least one future occupant and determining a number of occupants who mentioned the relevant dimensions and activating cues (see col.7 lines 23-40, the user sorts pictures into categories and is asked to describe which are good and which are not good i.e. prioritizing relevant dimensions); and

Developing the design objectives through use of the relevant dimensions and the activating cues, wherein the developing is accomplished by an architectural design team (see col.9. lines 23-36, the information extracted from the user is then used to guide the development of the user's design objectives).

As per claim 16, Zaltman teaches a method of claim 15, wherein the architectural design team includes at least one individual selected from the group of architects, engineers, builders, and landscape architects (see col.2 lines 32-35, the group consist of users such as customers, office personnel or management etc.). .

As per claim 17, Zaltman teaches a method of claim 15, wherein the occupants are selected from the group consisting of owners of a building, tenants of a building, employees who work in a building, visitors to a building, and medical patients who are treated in a building (see col.2 lines 32-35, the group consist of users such as customers, office personnel or management etc.).

As per claim 20, Zaltman teaches a method of developing a design, comprising the steps of: selecting a project to design; selecting a group of users of the project; performing a metaphor elicitation technique with the group of users;

Analyzing a set of results of the metaphor elicitation technique (see col.2 lines 59-63, ""further construct elicitation ... augment those elicited in steps");

Extracting relevant dimensions (see col.5 lines 56-61images are being extracted such as shapes i.e. dimensions) and activating cues from the set of results (see col.3 lines 62-64);

Prioritizing the relevant dimensions and the activating cues (see col.7 lines 23-40, the user sorts pictures into categories and is asked to describe which are good and which are not good i.e. prioritizing relevant dimensions);

Developing a set of design objectives through use of the relevant dimensions and the activating cues (see col.9. lines 23-36, the information extracted from the user is then used to guide the development of the user's design objectives); and

Developing a design based on the set of design objectives (see col.9. lines 23-36, the information extracted from the user is then used to guide the development of the user's design objectives).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 5-13, 18-19, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaltman as applied to claim 1 above in view of "AutoCAD 14, user's Guide", by AutoDesk, Copyright 1998 AutoDesk Inc. Pages 602 and 630, referred to hereinafter as AutoDesk.

As per claim 5, although Zaltman teaches the use of Metaphor Elicitation Technique to construct a design to implement a marketing campaign (see col.9 lines 31-36), he does not expressly teach architectural design objectives.

AutoDesk teaches AutoCAD tool to build structural design of homes, office facilities, etc. (see page 602 and page 630).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of AutoDesk relating to the simulation of architectural design, with the teachings of Zaltman relating to a Metaphor Elicitation Technique, to realize the claimed invention. An obvious motivation exists since this area of technology is highly competitive with many techniques of architectural design products available in the market place. Accordingly, a skilled artisan having access to the teachings of AutoDesk and Zaltman would have become aware of what capabilities had already been developed in the market place and, hence, would have knowingly modified the teachings of AutoDesk with the teachings of Zaltman in order to realize the elements of the claimed limitation and reduce cost and development time.

As per claim 6, although Zaltman teaches the use of Metaphor Elicitation Technique to construct a design to implement a marketing campaign (see col.9 lines

31-35), he does not expressly teach wherein architectural design objectives are for a hospital, residential home, a library, a hotel, a community ... or an auditorium.

AutoDesk teaches AutoCAD tool to build structural design of homes, office facilities, etc. (see page 602 and page 630).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of AutoDesk relating to the simulation of architectural design objectives of a house or an office space, with the teachings of Zaltman relating to a Metaphor Elicitation Technique, to realize the claimed invention. An obvious motivation exists since this area of technology is highly competitive with many techniques of architectural design products available in the market place. Accordingly, a skilled artisan having access to the teachings of AutoDesk and Zaltman would have become aware of what capabilities had already been developed in the market place and, hence, would have knowingly modified the teachings of AutoDesk with the teachings of Zaltman in order to realize the elements of the claimed limitation and reduce cost and development time.

As per claim 7, although Zaltman teaches the use of Metaphor Elicitation Technique to construct a design to implement a marketing campaign (see col.9 lines 31-35), he does not expressly teach wherein architectural design objectives are interior design objectives.

AutoDesk shows the interior design of an office space created by using AutoCAD (see page 690).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of AutoDesk relating to the simulation of an interior design, with the teachings of Zaltman relating to a Metaphor Elicitation Technique, to realize the claimed invention. An obvious motivation exists since this area of technology is highly competitive with many techniques of architectural design products available in the market place. Accordingly, a skilled artisan having access to the teachings of AutoDesk and Zaltman would have become aware of what capabilities had already been developed in the market place and, hence, would have knowingly modified the teachings of AutoDesk with the teachings of Zaltman in order to realize the elements of the claimed limitation and reduce cost and development time.

As per claim 8, although Zaltman teaches the use of Metaphor Elicitation Technique to construct a design to implement a marketing campaign (see col.9 lines 31-35), he does not expressly teach wherein architectural design objectives are interior design objectives of an office space.

AutoDesk shows the interior design of an office space created by using AutoCAD (see page 690).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of AutoDesk relating to the simulation of an interior design of an office space, with the teachings of Zaltman relating to a Metaphor Elicitation Technique, to realize the claimed invention. An obvious motivation exists since this area of technology is highly competitive with many

techniques of architectural design products available in the market place. Accordingly, a skilled artisan having access to the teachings of AutoDesk and Zaltman would have become aware of what capabilities had already been developed in the market place and, hence, would have knowingly modified the teachings of AutoDesk with the teachings of Zaltman in order to realize the elements of the claimed limitation and reduce cost and development time.

As per claim 9, although Zaltman teaches the use of Metaphor Elicitation Technique to construct a design to implement a marketing campaign (see col.9 lines 31-35), he does not expressly teach wherein architectural design objectives are of a military vehicle.

AutoDesk shows an architectural design of an underwater military vessel created by using AutoCAD (see page 8-9).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of AutoDesk relating to the simulation of architectural design of a military vehicle, with the teachings of Zaltman relating to a Metaphor Elicitation Technique, to realize the claimed invention. An obvious motivation exists since this area of technology is highly competitive with many techniques of architectural design products available in the market place. Accordingly, a skilled artisan having access to the teachings of AutoDesk and Zaltman would have become aware of what capabilities had already been developed in the market place and, hence, would have knowingly modified the teachings of AutoDesk with the

teachings of Zaltman in order to realize the elements of the claimed limitation and reduce cost and development time.

As per claim 10, although Zaltman teaches the use of Metaphor Elicitation Technique to construct a design to implement a marketing campaign (see col.9 lines 31-35), he does not expressly teach wherein architectural design objectives are exterior design objectives.

AutoDesk shows the exterior design of a college campus i.e. community created by using AutoCAD (see page 25).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of AutoDesk relating to the simulation of architectural design of a community, with the teachings of Zaltman relating to a Metaphor Elicitation Technique, to realize the claimed invention. An obvious motivation exists since this area of technology is highly competitive with many techniques of architectural design products available in the market place. Accordingly, a skilled artisan having access to the teachings of AutoDesk and Zaltman would have become aware of what capabilities had already been developed in the market place and, hence, would have knowingly modified the teachings of AutoDesk with the teachings of Zaltman in order to realize the elements of the claimed limitation and reduce cost and development time.

As per claim 11, although Zaltman teaches the use of Metaphor Elicitation Technique to construct a design to implement a marketing campaign (see col.9 lines

31-35), he does not expressly teach wherein architectural design objectives are exterior design objectives of a community.

AutoDesk shows the exterior design of a college campus i.e. a community created by using AutoCAD (see page 25).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of AutoDesk relating to the simulation of an exterior design of a community, with the teachings of Zaltman relating to a Metaphor Elicitation Technique, to realize the claimed invention. An obvious motivation exists since this area of technology is highly competitive with many techniques of architectural design products available in the market place. Accordingly, a skilled artisan having access to the teachings of AutoDesk and Zaltman would have become aware of what capabilities had already been developed in the market place and, hence, would have knowingly modified the teachings of AutoDesk with the teachings of Zaltman in order to realize the elements of the claimed limitation and reduce cost and development time.

As per claim 12, although Zaltman teaches the use of Metaphor Elicitation Technique to construct a design to implement a marketing campaign (see col.9 lines 31-35), he does not expressly teach wherein design objectives are for computer simulated-environments.

AutoDesk shows the design objective of an office space created by AutoCAD i.e. computer simulated (see page 690).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of AutoDesk relating to a computer simulation environment, with the teachings of Zaltman relating to a Metaphor Elicitation Technique, to realize the claimed invention. An obvious motivation exists since this area of technology is highly competitive with many techniques of architectural design products available in the market place. Accordingly, a skilled artisan having access to the teachings of AutoDesk and Zaltman would have become aware of what capabilities had already been developed in the market place and, hence, would have knowingly modified the teachings of AutoDesk with the teachings of Zaltman in order to realize the elements of the claimed limitation and reduce cost and development time.

As per claim 13, although Zaltman teaches the use of Metaphor Elicitation Technique to construct a design to implement a marketing campaign (see col.9 lines 31-35), he does not expressly teach wherein design objectives are for computer gaming-environments.

AutoDesk shows the design objective of an office space created by AutoCAD i.e. computer simulated (see page 690).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of AutoDesk relating to computer simulation environment, with the teachings of Zaltman relating to a Metaphor Elicitation Technique, to realize the claimed invention. An obvious motivation exists since this area of technology is highly competitive with many techniques of architectural design

products available in the market place. Accordingly, a skilled artisan having access to the teachings of AutoDesk and Zaltman would have become aware of what capabilities had already been developed in the market place and, hence, would have knowingly modified the teachings of AutoDesk with the teachings of Zaltman in order to realize the elements of the claimed limitation and reduce cost and development time.

As per claim 18, the limitation of claim 18 is similar to the limitation of claim 6; therefore it is rejected based on the same rationale, supra.

As per claim 19, the limitation of claim 19 is similar to the limitation of claim 6; therefore it is rejected based on the same rationale, supra.

As per claim 21, the limitation of claim 21 is similar to the limitation of claim 5; therefore it is rejected based on the same rationale, supra.

As per claim 22, the limitation of claim 21 is similar to the limitation of claim 5; therefore it is rejected based on the same rationale, supra.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Atasoy US PG. Pub. No. (US 2003/0097240) Method and apparatus for searching and retrieving architectural information for design of architectural projects.
- Miller US Pg. Pub. (2004/0074173) Marketing, design, and construction techniques for buildings.

- Underwood US Patent No. (6,609,128) codes table framework design in an e-commerce architecture.
- Bowman-Amuah US Pg. Pub. No. (us 2001/0052108) System, method and article of manufacturing for a development architecture framework.
- Asahi US Patent No. (5,404,440) Metaphor environment control system.
- Darwent et al. US PG. PUB. No. (us 2002/0107721) story-based organizational assessment and effect system.

Communication

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mussa A Shaawat whose telephone number is (571) 272-3785. The examiner can normally be reached on Monday-Friday (8:30am to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean R Homere can be reached on (571) 272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mussa Shaawat
Patent Examiner
April 14, 2005